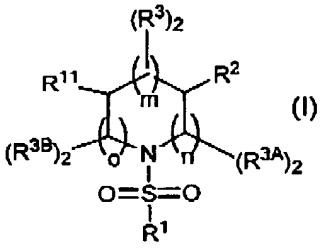
Amendments to the Claims

Please amend the claims as follows:

Claim 1 (Original): A compound of the formula



(I)

or a pharmaceutically acceptable salt, solvate or ester thereof, wherein:

(A) R^1 is selected from the group consisting of:

(1) unsubstituted aryl;

(2) aryl substituted with one or more R^5 groups;

(3) unsubstituted heteroaryl; and

(4) heteroaryl substituted with one or more R^5 groups,

(B) R^2 is selected from the group consisting of:

(1) alkyl;

(2) -XC(O)Y;

(3) -$(C_1$-$C_6)$alkylene-XC(O)Y;

(4) -$(C_0$-$C_6)$alkylene-$(C_3$-$C_6)$cycloalkylene-$(C_0$-$C_6)$alkylene-XC(O)Y;

(5) aryl;

(6) aryl substituted with one or more R^5 groups;

(7) heteroaryl;

(8) heteroaryl substituted with one or more R^5 groups;

(9) cycloalkylene-X-C(O)-Y;

(10) $-CH_2$-X-C(O)-NR^3-Y;

(11) $-CH_2$-X-C(O)-Y; and

(12) $-CH_2$-X-C(O)-NR^3-Y,

(C) Each R^3 is independently selected from the group consisting of:

(1) H; and

(2) alkyl,

(D) Each R^{3A} and R^{3B} is independently selected from the group consisting of:

(1) H; and

(2) alkyl;

(E) R^5 is independently selected from the group consisting of:

(1) halo;

(2) $-CF_3$;

(3) -OH;

(4) -O-alkyl;

(5) $-OCF_3$;

(6) -CN;

(7) $-NH_2$;

(8) $-C(O)_2$alkyl;

(9) $-C(O)NR^6R^7$;

(10) -alkylene-NR^6R^7;

(11) $-NR^6C(O)$alkyl;

(12) $-NR^6C(O)$aryl;

(13) $-NR^6C(O)$heteroaryl; and

(14) $-NR^6C(O)NR^6R^7$;

(F) X is selected from the group consisting of:

(1) -O-;

(2) -NH-;

(3) -N-alkyl; and

(4) -O-alkylene;

(G) Y is selected from the group consisting of:

(1) $-NR^6R^7$;

(2) $-N(R^3)(CH_2)_bNR^6R^7$ wherein b is 2-6;

(3) unsubstituted aryl;

(4) unsubstituted heteroaryl;

(5) -alkyl;

(6) -cycloalkyl,

(7) unsubstituted arylalkyl;

(8) unsubstituted arylcycloalkyl;

(9) unsubstituted heteroarylalkyl;

(10) unsubstituted heteroarylcycloalkyl;

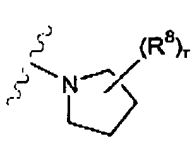
(11) unsubstituted arylheterocycloalkyl;

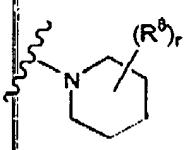
(12) substituted aryl;
(13) substituted heteroaryl;
(14) substituted arylalkyl;
(15) substituted arylcycloalkyl;
(16) substituted heteroarylalkyl;
(17) substituted heteroarylcycloalkyl; and
(18) substituted arylheterocycloalkyl;
(19) substituted heterocycloalkyl alkyl;
(20) unsubstituted heteroaryl alkyl;
(21) unsubstituted aryl alkyl heterocycloalkyl;
(22) unsubstituted heterocycloalkyl; and
(23) unsubstituted cycloalkyl,

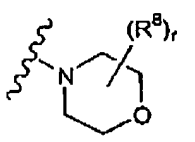
wherein the aryl moiety in said substituted groups (12), (14), (15), (18), and (21) of said Y group, and the heteroaryl moiety in said substituted groups (13), (16), (17) and (20) of said Y group, are substituted with one or more substituents independently selected from the group consisting of:

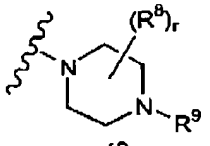
(a) halo;
(b) $-CF_3$;
(c) –OH;
(d) -O-alkyl;
(e) $-OCF_3$;
(f) -CN;
(g) $-NH_2$;
(h) $-C(O)_2(C_1-C_6)$alkyl;
(i) $-C(O)NR^6R^7$;
(j) $-(C_1-C_6)$alkylene-NR^6R^7;
(k) $-NR^6C(O)$alkyl;
(l) $-NR^6C(O)$aryl;
(m) $-NR^6C(O)$heteroaryl;
(n) $-NR^6C(O)NR^6R^7$; and
(o) alkyl,

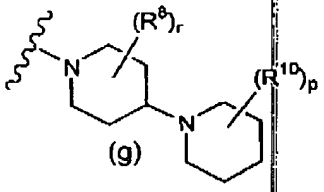
or Y is selected from the group consisting of:

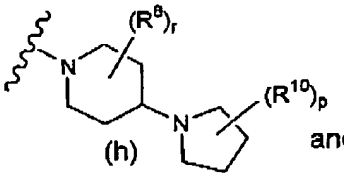

(c)


(d)

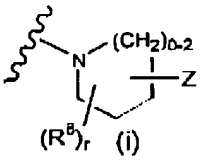

(e)


(f)


(g)


(h)

and


(i) ;

(H) R^6 and R^7 are independently selected from the group consisting of:

(1) H;

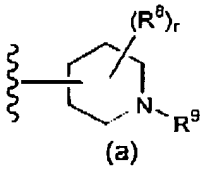
(2) alkyl;

(3) cycloalkyl;

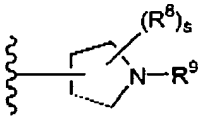
(4) arylalkyl;

(5) heteroarylalkyl;

(6)


(a)

(7)


(b) ; and

(8) heterocycloalkyl,

(I) Each R^8 is independently selected from the group consisting of:

(1) alkyl;

(2) alkyl substituted with 1 to 4 hydroxy groups; and

(3) –OH,

(J) Each R^9 is independently selected from the group consisting of:

(1) H;

(2) alkyl;

(3) alkyl substituted with 1 to 4 hydroxy groups;

(4) cycloalkyl;

(5) cycloalkyl substituted with 1 to 4 hydroxy groups;

(6) arylalkyl;

(7) heteroarylalkyl;

(8) -C(O)O-alkyl;

(9) alkylene-O-alkylene-OH;

(10) aryl substituted with one or more R^5 groups;

(11) heteroaryl substituted with one or more R^5 groups;

(12) unsubstituted heteroaryl;

(13) unsubstituted aryl;

(14) -alkylene-C(O)O-alkyl; and

(15) hydroxyalkyl-O-alkyl,

(K) Each R^{10} is independently selected from the group consisting of:

(1) H; and

(2) alkyl,

(L) R^{11} is selected from the group consisting of:

(1) unsubstituted aryl;

(2) substituted aryl;

(3) unsubstituted heteroaryl,

(4) alkyl;

(5) cycloalkyl;

(6) unsubstituted arylalkyl;

(7) unsubstituted arylcycloalkyl,

(8) unsubstituted heteroarylalkyl;

(9) unsubstituted heteroarylcycloalkyl;

(10) unsubstituted arylheterocycloalkyl;

(11) alkoxyalkyl;

(12) substituted heteroaryl;

(13) substituted arylalkyl;

(14) substituted arylcycloalkyl;

(15) substituted heteroarylalkyl; and

(16) substituted arylheterocycloalkyl,

wherein the aryl moiety in said substituted groups (2), (13), (14) and (16) of said R^{11} group, and the heteroaryl moiety in said substituted groups (12) and (15) of said R^{11} group, are substituted with one or more substituents independently selected from the group consisting of:

(a) halo;

(b) $-CF_3$;

(c) –OH;

(d) -O-alkyl;

(e) $-OCF_3$;

(f) -CN;

(g) $-NH_2$;

(h) $-C(O)_2(C_1-C_6)$alkyl;

(i) $-C(O)NR^6R^7$;

(j) $-(C_1-C_6)$alkylene-NR^6R^7;

(k) $-NR^6C(O)$alkyl;

(l) $-NR^6C(O)$aryl;

(m) $-NR^6C(O)$heteroaryl; and

(n) $-NR^6C(O)NR^6R^7$;

(M) (1) m is 0 to 3, and if m is greater than 1, m moieties can be the same or different from one another;

(2) n is 0 to 3, and if n is greater than 1, n moieties can be the same or different from one another;

(3) o is 0 to 3, and if o is greater than 1, o moieties can be the same or different from one another;

such that m+n+o is 1, 2, 3 or 4,

(N) p is 0 to 4, and if greater than 1, p moieties can be the same or different from one another;

(O) r is 0 to 4, and if greater than 1, r moieties can be the same or different from one another;

(P) s is 0 to 3, and if greater than 1, s moieties can be the same or different from one another; and

(Q) Z is selected from the group consisting of:

(1) unsubstituted heterocycloalkyl;

(2) substituted heterocycloalkyl;

(3) $-NH_2$;

(4) -NH(alkyl);

(5) $-N(alkyl)_2$ wherein each alkyl is the same or different;

(6) -NH(unsubstituted cycloalkyl);

(7) -NH(substituted cycloalkyl);

(8) -N(alkyl)(unsubstituted cycloalkyl);

(9) -N(alkyl)(substituted cycloalkyl);

(10) -NH(unsubstituted aralkyl);

(11) -NH(substituted aralkyl);

(12) -N(alkyl)(aralkyl);

(13) -NH(unsubstituted heterocycloalkyl);

(14) -NH(substituted heterocycloalkyl);

(15) -N(alkyl)(unsubstituted heterocycloalkyl),

(16) -N(alkyl)(substituted heterocycloalkyl);

(17) -NH(unsubstituted heteroaralkyl);

(18) -NH(substituted heteroaralkyl);

(19) -NH-alkylene-(unsubstituted cycloalkyl);

(20) -NH-alkylene-(substituted cycloalkyl);

(21) -N(alkyl)alkylene-(unsubstituted cycloalkyl);

(22) -N(alkyl)alkylene-(substituted cycloalkyl);

(23) -NHalkylene-(unsubstituted heterocycloalkyl);

(24) -NHalkylene-(substituted heterocycloalkyl);

(25) -N(alkyl)alkylene-(unsubstituted heterocycloalkyl);

(26) -N(alkyl)alkylene-(substituted heterocycloalkyl);

(27) unsubstituted benzofused heterocycloalkyl; and

(28) substituted benzofused heterocycloalkyl;

(29) H; and

(30) –N(hydroxyalkyl)$_2$, wherein each alkyl may be the same or different,

wherein said substituted heterocycloalkyl moiety of substituents (2), (14), (16), (24), (26) and (27) of group Z, and said substituted cycloalkyl moiety of substituents (7), (9), (20) and (22) of group Z, and said substituted aryl moiety of substituent (11) of group Z, and said substituted heteroaryl moiety of substituent (18) of group Z, are substituted with 1 to 3 groups independently selected from the group consisting of:

(a) alkyl;
(b) -OH;
(c) -Oalkyl;
(d) -OC(O)alkyl;
(e) -OC(O)aryl;
(f) -NH_2;
(g) -NH(alkyl);
(h) -N(alkyl)$_2$ wherein each alkyl is the same or different;
(i) -NHC(O)alkyl;
(j) -N(alkyl)C(O)alkyl;
(k) -NHC(O)aryl;
(l) -N(alkyl)C(O)aryl;
(m) -C(O)alkyl;
(n) -C(O)aryl;
(o) -C(O)NH_2;
(p) -C(O)NH(alkyl);
(q) -C(O)N(alkyl)$_2$ wherein each alkyl is the same or different;
(r) -C(O)$_2$alkyl;
(s) -alkylene-C(O)Oalkyl;
(t) piperidinyl;
(u) pyrrolidinyl;
(v) 1,1-ethylenedioxy;
(w) aryl;
(x) heteroaryl; and

(y) $-O-CH_2CH_2-O-$ wherein both oxygen atoms are bound to the same carbon atom, and provided that the aryl and heteroaryl moieties of said Z group are not substituted with said $-O-CH_2CH_2-O-$ group.

Claim 2 (Original): The compound of Claim 1 wherein:

(A) R^1 is aryl substituted with one or more R^5 groups;

(B) n is 0 or 1 and m is 1, 2 or 3 such that m+n is 3;

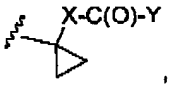
(C) p is 0 or 1; and

(D) R^2 is -XC(O)Y , $-(C_1-C_6)$alkylene-XC(O)Y or $-(C_0-C_6)$alkylene-(C_3-C_6)cycloalkylene-(C_0-C_6)alkylene-XC(O)Y.

Claim 3 (Original): The compound of Claim 2 wherein:

(A) R^1 is phenyl substituted with one or more R^5 groups; and

(B) n is 0 and m is 3.

Claim 4 (Original): The compound of Claim 1, wherein R^2 is 

, wherein X and Y are as defined.

Claim 5 (Original): The compound of Claim 3 wherein R^1 is phenyl substituted with one or more halo atoms.

Claim 6 (Original): The compound of Claim 1 wherein:

(A) R^1 is aryl substituted with one or more R^5 groups;

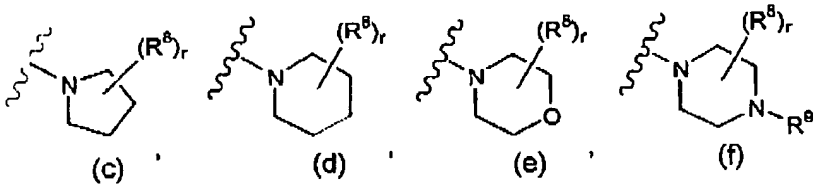
(B) n is 0 or 1 and m is 1, 2 or 3 such that m+n is 3;

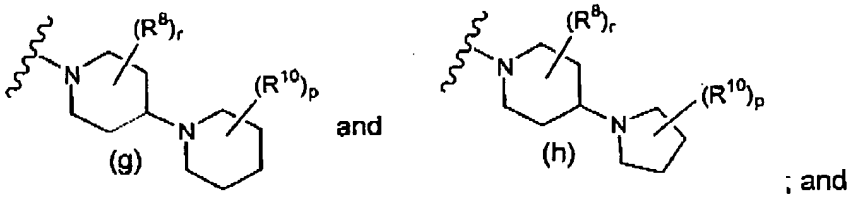
(C) p is 0 or 1;

(D) R^2 is -XC(O)Y , $-(C_1-C_6)$alkylene-XC(O)Y or $-(C_0-C_6)$alkylene-(C_3-C_6)cycloalkylene-(C_0-C_6)alkylene-XC(O)Y;

(E) X is O;

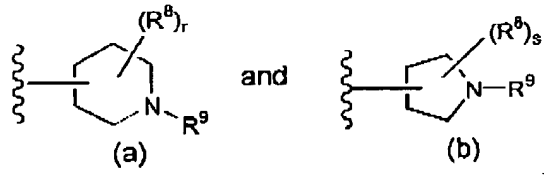
(F) Y is $-NR^6R^7$; or Y is selected from the group consisting of:





; and

(G) R^6 and R^7 are independently selected from the group consisting of: H, methyl, ethyl, -(C_3-C_8)cycloalkyl, -aryl(C_1-C_6)alkyl, 4-pyridylmethyl, and

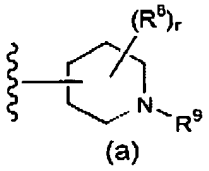


Claim 7 (Original): The compound of Claim 6 wherein:

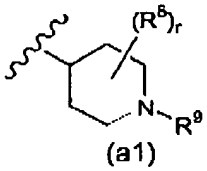
(A) R^1 is phenyl substituted with one or more R^5 groups;

(B) n is 0 and m is 3;

(C) said group

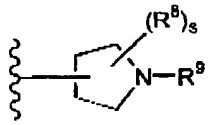


is a group of the formula:



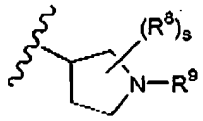
;

(D) said group



(b)

is a group of the formula:



(b1) ; and

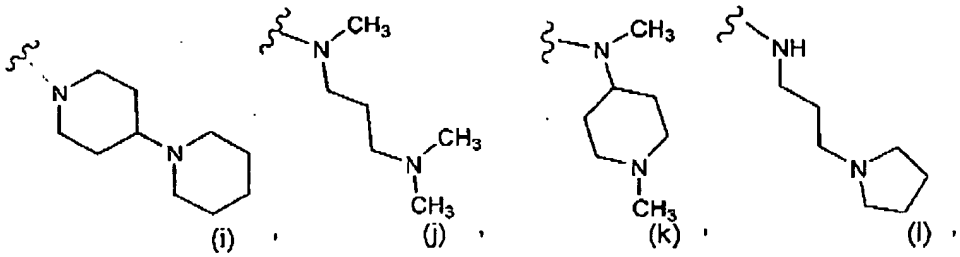
(E) R^{11} is selected from the group consisting of: -$(C_1$-$C_6)$alkyl, $(C_3$-$C_8)$-cycloalkyl, aryl, aryl$(C_1$-$C_6)$alkyl and -$(C_1$-$C_6)$alkoxyalkyl.

Claim 8 (Original): The compound of Claim 7 wherein said R^{11} is selected from the group consisting of: methyl, ethyl, cyclohexyl, phenyl, benzyl, $-(CH_2)_2$phenyl, and $-CH_2OCH_3$.

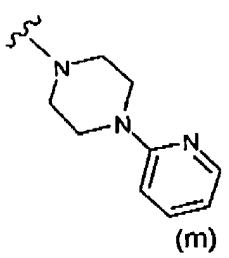
Claim 9 (Original): The compound of Claim 7 wherein R^1 is phenyl substituted with one or more halo atoms.

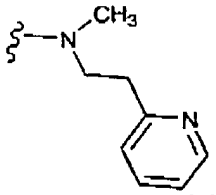
Claim 10 (Original): The compound of Claim 8 wherein $R^{11}$is phenyl substituted with one or more halo atoms.

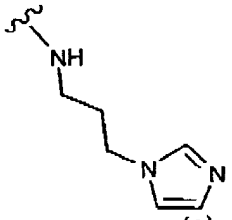
Claim 11 (Original): The compound of Claim 6 wherein Y is selected from the group consisting of:

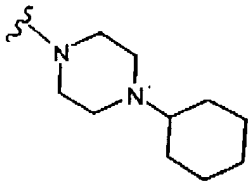


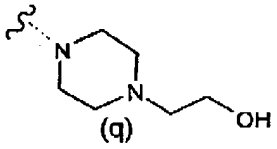
(i) , (j) , (k) , (l) ,


(m),

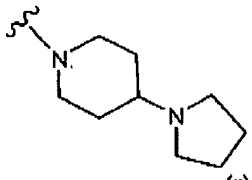

(n),


(o),


(p),


(q)

and


(r).

Claim 12 (Original): The compound of Claim 1 selected from a final compound of Examples 1-29, 31-33, 35-48, 50-61, 63-67,67A-67BR, 68,69, 71-74, 74A, 74B, 74C, 75, 76, 78-83, 85-99,101-159,159A, 159B, 159C, 160, 160A-160AA, 161, 161A-161G, 162, 162A, 162B, 162C, 164, 164A, 164B, 164C, 165-167, 167A, 167B, 167C, 168, 168A, 169, 169A-169D, 170, 170A-170AD, 171-173, 173A-173T, and 174.

Claim 13 (Original): The compound of Claim 1 selected from a final compound of Examples 67B, 67E, 67N, 67P, 67U, 67AG, 67AT, 67AW, 67AY, 67BA, 67BD, 67BE, 67BG, 67BH, 67BL, 160B, 160K, 161, 161A, 161E, 161F, 173, 173A, 173B, 173C, 173E, 173G, 173I, 173J, 173K, 173L and 173N.

Claim 14 (Currently Amended): The compound of Claim 1 selected from a final compound of Examples 7-B, 7-AT, 7-BG, 61-A, 73, 173-A, 173-C, 173-E, 173-J, and 173-N.

Claim 15 (Original): A pharmaceutical composition comprising at least one compound of Claim 1 and at least one pharmaceutically acceptable carrier.

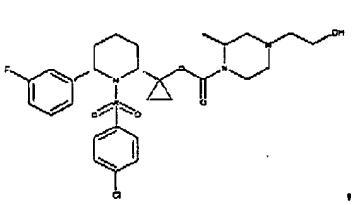
Claim 16 (Original): A method of inhibiting gamma-secretase in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one or more compounds of Claim 1.

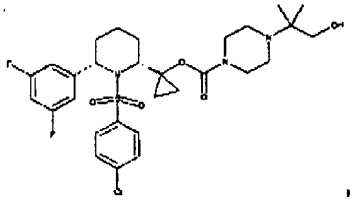
Claim 17 (Original): A method of treating one or more neurodegenerative diseases in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one or more compounds of Claim 1.

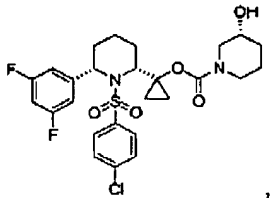
Claim 18 (Original): A method of inhibiting the deposition of beta amyloid protein in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one more compounds of Claim 1.

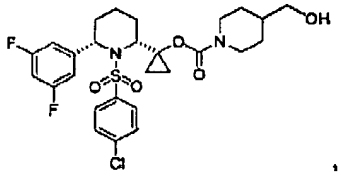
Claim 19 (Original): A method of treating Alzheimer's disease in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one or more compounds of Claim 1.

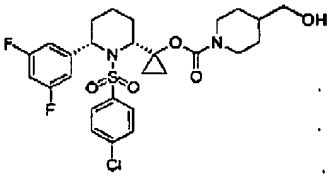
Claim 20 (Original): A compound selected from the group consisting of:



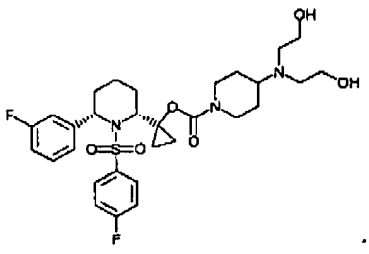








and



Claim 21 (Original): A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 20, or a pharmaceutically acceptable salt, ester or solvate thereof, together with a pharmaceutically acceptable excipient, diluent or carrier.

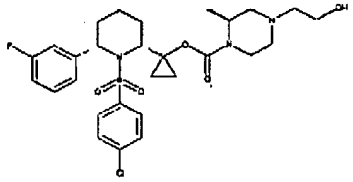
Claim 22 (Original): A method of inhibiting gamma-secretase in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one or more compounds of Claim 20.

Claim 23 (Original): A method of treating one or more neurodegenerative diseases in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one or more compounds of Claim 20.

Claim 24 (Original): A method of inhibiting the deposition of beta amyloid protein in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one more compounds of Claim 20.

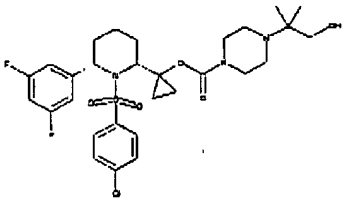
Claim 25 (Original): A method of treating Alzheimer's disease in a patient in need of such treatment comprising administering to said patient a therapeutically effective amount of one or more compounds of Claim 20.

Claim 26 (Original): A compound of the following formula



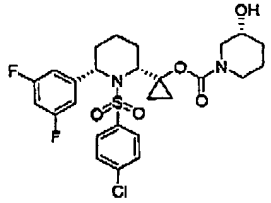
or a pharmaceutically acceptable salt, ester or solvate of said compound.

Claim 27 (Original): A compound of the following formula



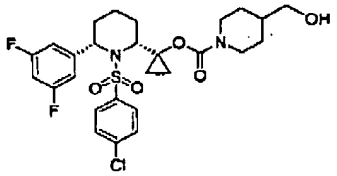
or a pharmaceutically acceptable salt, ester or solvate of said compound.

Claim 28 (Original): A compound of the following formula



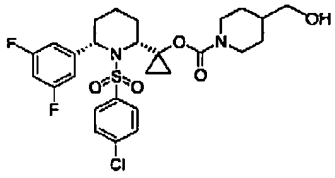
or a pharmaceutically acceptable salt, ester or solvate of said compound.

Claim 29 (Original): A compound of the following formula



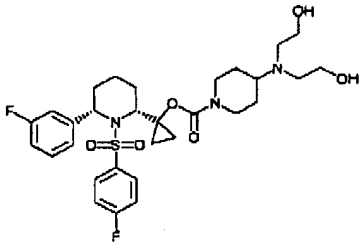
or a pharmaceutically acceptable salt, ester or solvate of said compound.

Claim 30 (Original): A compound of the following formula



or a pharmaceutically acceptable salt, ester or solvate of said compound.

Claim 31 (Original): A compound of the following formula



or a pharmaceutically acceptable salt, ester or solvate of said compound.